April 2, 2003

Nancy Norton Imagineering Enterprises, Inc. 1302 West Sample Street South Bend, Indiana 46619

Re: 141-17211

First Significant Revision to FESOP 141-14152-00090

Dear Nancy Norton:

Imagineering Enterprises, Inc. was issued a FESOP on November 18, 2002 for their metal finishing and coating operation. A letter requesting changes to this permit was received on February 13, 2003. Pursuant to the provisions of 326 IAC 2-8-11.1 a significant permit revision to this permit is hereby approved as described in the attached Technical Support Document.

The revision makes changes to the limits for several of the paint booths.

The following construction conditions are applicable to the proposed project:

# 1. <u>General Construction Conditions</u>

The data and information supplied with the application shall be considered part of this source modification approval. Prior to <u>any</u> proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).

- 2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
- 3. <u>Effective Date of the Permit</u> Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
- 4. Pursuant to 326 IAC 2-1.1-9 (Revocation), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
- 5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

Page 2 of 2 141-17211

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Donald Poole, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call at (800) 451-6027, press 0 and ask for Donald Poole or extension 2-8327, or dial (317) 232-8327.

Sincerely,

Paul Dubenetzky, Chief Permits Branch Office of Air Quality

# Attachments

drp

cc: File - St. Joseph County

U.S. EPA, Region V

St. Joseph County Health Department

Northern Regional Office

Air Compliance Section Inspector - Paul Karkiewicz

Compliance Data Section - Karen Nowak

Administrative and Development

Technical Support and Modeling - Michele Boner

# FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) RENEWAL OFFICE OF AIR QUALITY

# Imagineering Enterprises, Inc. 1302 West Sample Street South Bend, Indiana 46619-3894

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F 141-14152-00090	
Issued by:Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: November 18, 2002 Expiration Date: November 18, 2007

First Administrative Amendment 141-16781, issued on November 27, 2002.

First Significant Permit Revision 141-17211	Pages Amended: 26, 27, 36a, 36b, 40, 40a, 40b, 42, 43, and 44
Issued by:Signed by	Date Issued:April 2, 2003
Paul Dubenetzky, Branch Chief Office of Air Quality	

(I) One (1) portable immersion cold cleaner tank, identified as I-14, constructed in 2000, using isopropyl alcohol, capacity: 6 gallons.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

# Emission Limitations and Standards [326 IAC 2-8-4(1)]

# D.1.1 Volatile Organic Compounds (VOC) [326 IAC 2-8-4] [326 IAC 8-6-2(a)] [326 IAC 8-1-1] [326 IAC 8-2]

- (a) The amount of VOC delivered to the applicators at the total of the three (3) paint booths (K-1, K-2, and K-6) and the VOC used at the one (1) centrifuge dip and spin dry film coating machine (L-2), one (1) cold cleaner immersion tank (C-24), six (6) portable cold cleaner degreasers (I-3 through I-8), one (1) cold cleaner tank (C-29), one (1) immersion solvent cleaning tank (I-13), one (1) portable immersion cold cleaner tank (I-14), and three (3) insignificant oil tanks (J-12, C-9 and C-26) shall be limited to less than 98.0 tons per twelve (12) consecutive month period, total, with compliance determined at the end of each month. This will limit the potential to emit VOC from the entire source to less than 100 tons per year. Therefore, the requirements of 326 IAC 2-7 do not apply. Compliance with this limit will also satisfy the requirements of 326 IAC 8-6, Organic Solvent Emission Limitations.
- (b) The VOC delivered to the applicators at the two (2) paint booths, identified as K-1 and K-2, shall be limited to less than 15 pounds per day for each booth. Therefore, pursuant to 326 IAC 8-1-1, the requirements of 326 IAC 8-2 are not applicable.
- (c) The VOC used at the one (1) centrifuge dip and spin dry film coating machine, identified as L-2, shall be limited to less than 15 pounds per day. Therefore, pursuant to 326 IAC 8-2-1(a)(4), the requirements of 326 IAC 8-2 are not applicable.

# D.1.2 Hazardous Air Pollutants (HAPs) [326 IAC 2-8-4]

- (a) The worst case single HAP delivered to the coating applicators at the three (3) paint booths (K-1, K-2, and K-6) and used at the one (1) centrifuge dip and spin dry film coating machine (L-2), one (1) cold cleaner immersion tank (C-24), six (6) portable cold cleaner degreasers (I-3 through I-8), one (1) cold cleaner tank (C-29), one (1) immersion solvent cleaning tank (I-13), one (1) portable immersion cold cleaner tank (I-14), and three (3) insignificant oil tanks (J-12, C-9 and C-26) shall be limited to less than 9.9 tons per twelve (12) consecutive month period, total, with compliance determined at the end of each month. This will limit the potential to emit each individual HAP from the entire source to less than 10 tons per year. Therefore, the requirements of 326 IAC 2-7 do not apply.
- (b) The combination of HAPs delivered to the coating applicators in the three (3) paint booths (K-1, K-2, and K-6) and the total HAPS used at the one (1) centrifuge dip and spin dry film coating machine (L-2), one (1) cold cleaner immersion tank (C-24), six (6) portable cold cleaner degreasers (I-3 through I-8), one (1) cold cleaner tank (C-29), one (1) immersion solvent cleaning tank (I-13), one (1) portable immersion cold cleaner tank (I-14), and three (3) insignificant oil tanks (J-12, C-9 and C-26), shall be limited to less than 24.7 tons per twelve (12) consecutive month period, total, with compliance determined at the end of each month. This will limit the potential to emit total HAPs from the entire source to less than 25 tons per year. Therefore, the requirements of 326 IAC 2-7 do not apply.

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Permit Reviewer: CAP/MES Revised by: drp

D.1.3 Particulate Matter - 10 microns (PM<sub>10</sub>) [326 IAC 2-8-4]

Any change or modification at the three (3) paint booths (K-1, K-2, and K-6) which increases the solids delivered to the applicators to 2,130 tons per twelve (12) consecutive month period may cause the potential to emit  $PM_{10}$  to increase to 100 tons per year or more, making the requirements of 326 IAC 2-7, Part 70, applicable, based on a fifty percent (50%) transfer efficiency and a control efficiency of ninety-eight percent (98%), and shall require prior IDEM, OAQ, approval. This Condition, in conjunction with the limit of Condition D.2.2, will limit the potential to emit  $PM_{10}$  to less than 100 tons per year from the entire source and make the requirements of 326 IAC 2-7, Part 70, not applicable.

# D.1.4 Volatile Organic Compounds (VOC) [326 IAC 8-3-2][326 IAC 8-3-5]

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of the one (1) cold cleaner immersion tank (C-24), six (6) portable cold cleaner degreasers (I-3 through I-8), one (1) cold cleaner tank (C-29), one (1) immersion solvent cleaning tank (I-13), and one (1) portable immersion cold cleaner tank (I-14) without remote solvent reservoirs in St. Joseph County shall:
  - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
    - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF));
    - (B) The solvent is agitated; or
    - (C) The solvent is heated.
  - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
  - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
  - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
  - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9EC) (one hundred twenty degrees Fahrenheit (120EF)):
    - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
    - (B) A water cover when solvent is used is insoluble in, and heavier than, water

#### Page 36a of 46 141-14152-00090

#### **SECTION D.4**

#### **FACILITY OPERATION CONDITIONS**

## Facility Description [326 IAC 2-8-4(10): Coating operations

(n) One paint booth, identified as K-6, equipped with electrostatic airless guns, including dry filters for overspray control, exhausted thru Duct E.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

## Emission Limitations and Standards [326 IAC 2-8-4(1)]

- D.4.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]
  - (a) For the topcoat operation, the VOC delivered to a coating applicator that applies extreme performance coatings shall be limited to 3.5 pounds of VOC per gallon of coating excluding water.
  - (b) For the primer operation, the VOC delivered to a coating applicator shall be limited to 3.0 pounds of VOC per gallon of coating, excluding water.
  - (c) Pursuant to 326 IAC 8-1-1(b), the requirements of 8-2 (listed here as D.4.1(a) and D.4.1(b)) are not applicable on days that the VOC delivered to the applicator is limited to less than 15 pounds per day.
- D.4.2 Particulate Matter (PM) [40 CFR 52, Subpart P]

Pursuant to 40 CFR 52, Subpart P, the PM from the one paint booth, K-6, shall not exceed the pound per hour emission rate established as E in the following formulas:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where  $E =$  rate of emission in pounds per hour, and  $P =$  process weight rate in tons per hour

or

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40$$
 where  $E =$ rate of emission in pounds per hour, and  $P =$ process weight rate in tons per hour.

D.4.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the one paint booth, K-6.

#### Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

#### D.4.4 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the paint booth stack First Significant Permit Revision 141-17211 Revised by: drp

(Duct E). The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

- (b) Monthly inspections shall be performed of the coating emissions from the stack (Duct E) and the presence of overspray on the nearby ground. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (c) Additional inspection and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

#### Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-16]

# D.4.5 Record Keeping Requirements

- To document compliance with Condition D.4.1, the Permittee shall maintain records in accordance with (1 and 2) below. Records maintained for (1) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC emission limits.
  - (1) The VOC content of each coating material and the solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.
  - (2) For coatings used for D.4.1(c), the VOC content of each coating material and the solvents used. These records shall be kept on a daily basis.
- (b) To document compliance with Condition D.4.4, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements of this permit.

#### D.4.6 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.4.1(c) shall be submitted to the address listed in Section C - General Reporting Requirements of this permit using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

# **FESOP Monthly Report**

Source Name: Imagineering Enterprises, Inc.

Source Address: 1302 West Sample Street, South Bend, Indiana 46619-3895 Mailing Address: 1302 West Sample Street, South Bend, Indiana 46619-3895

FESOP No.: F 141-14152-00090
Facility: Paint booth K-1
VOC usage

Limit: Less than 15 pounds per day

Months:	Year:	

Day	Month 1 VOC usage (lbs)	Month 2 VOC usage (lbs)	Month 3 VOC usage (lbs)	Day	Month 1 VOC usage (lbs)	Month 2 VOC usage (lbs)	Month 3 VOC usage (lbs)
1				17			
2				18			
3				19			
4				20			
5				21			
6				22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14			·	30			· ·
15			·	31			· ·
16				No. of deviations			

- 9 No deviation occurred in this month.
- 9 Deviation/s occurred in this month.
  Deviation has been reported on:

Submitted by:

Title/Position:

Signature:

Date:

Phone:

First Significant Permit Revision 141-17211 Revised by: drp Page 40a of 46 141-14152-00090

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

# **FESOP Monthly Report**

Source Name: Imagineering Enterprises, Inc.

Source Address: 1302 West Sample Street, South Bend, Indiana 46619-3895 Mailing Address: 1302 West Sample Street, South Bend, Indiana 46619-3895

FESOP No.: F 141-14152-00090 Facility: Paint booth K-2 VOC usage

Limit: Less than 15 pounds per day

Months:	Year:
Months:	Year:

Day	Month 1 VOC usage (lbs)	Month 2 VOC usage (lbs)	Month 3 VOC usage (lbs)	Day	Month 1 VOC usage (lbs)	Month 2 VOC usage (lbs)	Month 3 VOC usage (lbs)
1			•	17			
2				18			
3				19			
4				20			
5				21			
6				22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31			_
16				No. of deviations			

- 9 No deviation occurred in this month.
- 9 Deviation/s occurred in this month. Deviation has been reported on:

Submitted by:

Title/Position:

Signature:

Date:

Phone:

First Significant Permit Revision 141-17211 Revised by: drp Page 40b of 46 141-14152-00090

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

# **FESOP Monthly Report**

Source Name: Imagineering Enterprises, Inc.

Source Address: 1302 West Sample Street, South Bend, Indiana 46619-3895 Mailing Address: 1302 West Sample Street, South Bend, Indiana 46619-3895

FESOP No.: F 141-14152-00090 Facility: Paint booth K-6 Parameter: VOC usage

Limit: Less than 15 pounds per day

Months:	Year:

Day	Month 1 VOC usage (lbs)	Month 2 VOC usage (lbs)	Month 3 VOC usage (lbs)	Day	Month 1 VOC usage (lbs)	Month 2 VOC usage (lbs)	Month 3 VOC usage (lbs)
1				17			
2				18			
3				19			
4				20			
5				21			
6				22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31			
16				No. of deviations			

- 9 No deviation occurred in this month.
- 9 Deviation/s occurred in this month. Deviation has been reported on:

Submitted by:

Title/Position:

Signature:

Date:

Phone:

Imagineering Enterprises, Inc. South Bend, Indiana

First Significant Permit Revision 141-17211

Permit Reviewer: CAP/MES Revised by: drp

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION FESOP Quarterly Report

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141-14152-00090

Source Name: Imagineering Enterprises, Inc.

Source Address: 1302 West Sample Street, South Bend, Indiana 46619-3895 Mailing Address: 1302 West Sample Street, South Bend, Indiana 46619-3895

FESOP No.: F 141-14152-00090

Facilities: Three (3) paint booths (K-1, K-2, and K-6), one (1) centrifuge dip and spin dry film

coating machine (L-2), one (1) cold cleaner immersion tank (C-24), six (6) portable cold cleaner degreasers (I-3 through I-8), one (1) cold cleaner tank (C-29), one (1) immersion solvent cleaning tank (I-13), one (1) portable immersion cold cleaner tank

(I-14) and three (3) insignificant oil tanks (J-12, C-9 and C-26)

Parameter: VOC delivered to the applicators at the two (2) paint booths plus VOC usage at the

other facilities

Limit: Less than 98.0 tons per twelve (12) consecutive month period, total, with compliance

determined at the end of each month

YEAR:			
-------	--	--	--

Month	VOC Usage (tons)	VOC Usage (tons)	VOC Usage (tons)
	This Month	Previous 11 Months	12 Month Total

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter. Deviation has been reported on:

SH	bmitted	hw.
Ou		ı Dy.

Title / Position:

Signature:

Date:

Phone:

First Significant Permit Revision 141-17211 Revised by: drp Page 43 of 46 141-14152-00090

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

#### **FESOP Quarterly Report**

Source Name: Imagineering Enterprises, Inc.

Source Address: 1302 West Sample Street, South Bend, Indiana 46619-3895 Mailing Address: 1302 West Sample Street, South Bend, Indiana 46619-3895

FESOP No.: F 141-14152-00090

Facilities: Three (3) paint booths (K-1, K-2, and K-6), one (1) centrifuge dip and spin dry film

coating machine (L-2), one (1) cold cleaner immersion tank (C-24), six (6) portable cold cleaner degreasers (I-3 through I-8), one (1) cold cleaner tank (C-29), one (1) immersion solvent cleaning tank (I-13), one (1) portable immersion cold cleaner tank

(I-14) and three (3) insignificant oil tanks (J-12, C-9 and C-26)

Parameter: Worst case single HAP usage (Individual HAP delivered to the applicators at the

three (3) paint booths plus individual HAP usage at the other facilities)

Limit: Less than 9.9 tons per twelve (12) consecutive month period, total, with compliance

determined at the end of each month

YEAR:

Month	Worst case single HAP usage (tons)	Worst case single HAP usage (tons)	Worst case single HAP usage (tons)
	This Month	Previous 11 Months	12 Month Total

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter. Deviation has been reported on:

Submitted by:

Title / Position:

Signature:

Date:

Phone:

First Significant Permit Revision 141-17211 Revised by: drp Page 44 of 46 141-14152-00090

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

# **FESOP Quarterly Report**

Source Name: Imagin	neering Enterpri	ises. Inc.
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Source Address: 1302 West Sample Street, South Bend, Indiana 46619-3895 Mailing Address: 1302 West Sample Street, South Bend, Indiana 46619-3895

FESOP No.: F 141-14152-00090

Facilities: Three (3) paint booths (K-1, K-2, and K-6), one (1) centrifuge dip and spin dry film

coating machine (L-2), one (1) cold cleaner immersion tank (C-24), six (6) portable cold cleaner degreasers (I-3 through I-8), one (1) cold cleaner tank (C-29), one (1) immersion solvent cleaning tank (I-13), one (1) portable immersion cold cleaner tank

(I-14) and three (3) insignificant oil tanks (J-12, C-9 and C-26)

Parameter: Total HAP usage (Combination of HAPs delivered to the applicators at the three (3)

paint booths plus total HAPs usage at the other facilities)

Limit: Less than 24.8 tons per twelve (12) consecutive month period, total, with

compliance determined at the end of each month

YEAR: \_\_\_\_\_

Month	Total HAP Usage (tons)	Total HAP Usage (tons)	Total HAP Usage (tons)
	This Month	Previous 11 Months	12 Month Total

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter. Deviation has been reported on:

Submitted by:

Title / Position:

Signature:

Date:

Phone:

# Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Significant Permit Revision to a Federally Enforceable State Operating Permit

#### **Source Background and Description**

Source Name: Imagineering Enterprises, Inc.

Source Location: 1302 West Sample Street, South Bend, Indiana

46619-3894

County: St. Joseph SIC Code: 3471/3479

Operation Permit No.: 141-14152-00090
Operation Permit Issuance Date: November 18, 2002

Permit Revision No.: 141-17211
Permit Reviewer: drpoole

The Office of Air Quality (OAQ) has reviewed a revision application from Imagineering Enterprises, Inc. relating to the changes to their existing permit.

The source wants to adjust the limits to paint booths K-1 and K-2. Separate limits of 15 pounds of VOC per day are requested for each booth. For booth K-6, an additional limit of 15 pounds of VOC per day is requested. Booth K-6 already has rule 326 IAC 8-2-9 applicable. Under rule 326 IAC 8-1-1, the addition of a separate limit of 15 pounds of VOC per day can be accomplished. However, this will be characterized as a State Implementation Plan (SIP) revision per 326 IAC 8-1-1(d).

#### Justification for the Revision

The FESOP is being modified through a Significant Permit Revision. This revision is being performed pursuant to 326 IAC 2-8-11.1(f). The revision is being treated as significant due to the SIP revision aspect.

#### **Existing Approvals**

The source was issued a FESOP (F141-14152-00090) on November 18, 2002. The source has since received the following:

(a) First Administrative Amendment No.: 141-16781, issued on November 27, 2002.

### **Enforcement Issue**

There are no enforcement actions pending.

#### Recommendation

The staff recommends to the Commissioner that the Significant Permit Revision be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on February 13, 2002.

#### **Emission Calculations**

There will be a potential emissions increase due to the separation of the limits related to booths K-1 and K-2. This emission increase will be:

(15 pounds of VOC/day)(365 days/year)(1 ton/2000 pounds) = 2.7 tons VOC/year

The additional limitation on booth K-6 will not increase the potential to emit for this booth.

Therefore, the total PTE change due to this revision is 2.7 tons VOC per year.

#### Potential To Emit of the Revision

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	Potential To Emit (tons/year)
PM	-
PM-10	-
SO <sub>2</sub>	-
VOC	2.7
СО	-
NO.	-

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Single HAP	2.7
TOTAL	2.7

The emissions related to the revision are less than the exemption levels listed in 326 IAC 2-1.1-3. However, as noted, the addition of the limit to booth K-6 will require a SIP revision. Therefore, a significant permit revision will be issued.

#### Potential to Emit of the Source

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units. This table does not include the emissions related to the revision.

	Potential to Emit (tons/year)							
	PM PM-10 SO <sub>2</sub> VOC CO NO <sub>X</sub> HAPs							
Total Emissions	32.7 < 100 1.0 < 100 5.0 14.5 < 10/25							

The potentials to emit of PM-10, VOC, and HAPs are limited for the source to be a FESOP. All these limitation figures are taken from the Technical Support Document for FESOP 141-17211.

# **County Attainment Status**

The source is located in St. Joseph County.

Pollutant	Status
PM-10	unclassifiable
SO <sub>2</sub>	attainment
$NO_2$	attainment
Ozone	maintenance
СО	attainment
Lead	unclassifiable

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. St. Joseph County has been designated as maintenance attainment for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21. See the State Rule Applicability for the source section.
- (b) St. Joseph County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, those emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21. See the State Rule Applicability for the source section.

#### **Federal Rule Applicability**

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this revision.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 20 and 40 CFR Parts 61 and 63) applicable to this revision.

# State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

This source was constructed after August 7, 1977. However, the potential to emit each criteria pollutant is less than 250 tons per year and this source is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2. Therefore, the requirements of 326 IAC 2-2, PSD, are not applicable.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The majority of this source was constructed prior to July 1997. There have been some units added since July 1997. Therefore, the total source will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. This will be accomplished thru a limit in the permit. Therefore, 326 IAC 2-4.1 does not apply.

#### 326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit of more than ten (10) tons per year of VOC and  $NO_X$  in St. Joseph County. Pursuant to this rule, the owner/operator of the source must submit an emission statement for the source. The statement must be received in accordance with the compliance schedule specified in 326 IAC 2-6 and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8).

# 326 IAC 2-8-4 (FESOP)

These limits will have to be adjusted to take into account the emissions of booth K-6.

Pursuant to this rule, the amount of PM<sub>10</sub> and VOC shall be limited to less than one hundred (100) tons per year. In addition, the amount of a single HAP shall be limited to less than ten (10) tons per year and the combination of all HAPs shall be limited to less than twenty-five (25) tons per year. Each of the limits has been adjusted to allow for emissions related to insignificant activities. Therefore, the requirements of 326 IAC 2-7 do not apply.

- (a) The amount of VOC delivered to the applicators at the total of the three (3) paint booths (K-1, K-2, and K-6) and the VOC used at the one (1) centrifuge dip and spin dry film coating machine (L-2), one (1) cold cleaner immersion tank (C-24), six (6) portable cold cleaner degreasers (I-3 through I-8), one (1) cold cleaner tank (C-29), one (1) immersion solvent cleaning tank (I-13), one (1) portable immersion cold cleaner tank (I-14) and three (3) insignificant oil tanks (J-12, C-9 and C-26) shall be limited to less than 98.0 tons per twelve (12) consecutive month period, total, with compliance determined at the end of each month. This will limit the potential to emit VOC from the entire source to less than 100 tons per year and shall make the requirements of 326 IAC 2-7, not applicable.
- (b) HAP emissions will be limited as follows:
  - (1) The worst case single HAP delivered to the coating applicators at the three (3) paint booths (K-1, K-2, and K-6) and used at the one (1) centrifuge dip and spin dry film coating machine (L-2), one (1) cold cleaner immersion tank (C-24), six (6) portable cold cleaner degreasers (I-3 through I-8), one (1) cold cleaner tank (C-29), one (1) immersion solvent cleaning tank (I-13), one (1) portable immersion cold cleaner tank (I-14) and three (3) insignificant oil tanks (J-12, C-9 and C-26) shall be limited to less than 9.9 tons per twelve (12) consecutive month period, total, with compliance determined at the end of each month. This will limit the potential to emit each individual HAP to less than 10 tons per year. Therefore, the requirements of 326 IAC 2-7 do not apply.
  - (2) The combination of HAPs delivered to the coating applicators in the three (3) paint booths (K-1, K-2, and K-6) and the total HAPS used at the one (1) centrifuge dip and spin dry film coating machine (L-2), one (1) cold cleaner immersion tank (C-24), six (6) portable cold cleaner degreasers (I-3 through I-8), one (1) cold cleaner tank (C-29), one (1) immersion solvent cleaning tank (I-13), one (1) portable immersion cold cleaner tank (I-14) and three (3) insignificant oil tanks (J-12, C-9 and C-26) shall be limited to less than a total of 24.7 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. This will limit the potential to emit total HAPs to less than 25 tons per year. Therefore, the requirements of 326 IAC 2-7 do not apply.
- (d) The potential to emit  $PM_{10}$  is limited as follows:
  - (1) The potential to emit  $PM_{10}$  from the four (4) blaster booths and one (1) tumble

blaster, collectively identified as J-9, shall not exceed 16.7 pounds per hour, equivalent to 73.1 tons per year. The potential to emit  $PM_{10}$  from the four (4) blaster booths and one (1) tumble blaster is 1.01 pounds per hour after control by the baghouse. Therefore, the four (4) blaster booths and one (1) tumble blaster will comply with this requirement, and the baghouse dust collectors shall be in operation at all times when the either or all of the four (4) blaster booths and one (1) tumble blaster exhausting to that baghouse dust collector is in operation.

(2) Any change or modification at the three (3) paint booths (K-1, K-2, and K-6) which increases the solids delivered to the applicators to 2,130 tons per twelve (12) consecutive month period may cause the source to become subject to the requirements of 326 IAC 2-7, Part 70, and shall require IDEM, OAQ, approval. Based on a fifty percent (50%) transfer efficiency and a control efficiency of ninety-eight percent (98%), when using dry filters, this throughput limit is equivalent to PM<sub>10</sub> emissions of 21.3 tons per year from the total of the three (3) paint booths and less than 100 tons per year from the total of all facilities at this source, when operating the dry filters at all times when the three (3) paint booths are in operation.

#### 326 IAC 5-1 (Opacity Limitations)

This source is located north of Kern Road and East of Pine Road in St. Joseph County. Therefore, pursuant to 326 IAC 5-1-2 (Opacity limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

# State Rule Applicability - Individual Facilities

326 IAC 6-3-2

These requirements do not change for either booth K-1, K-2, or K-6 due to the revision.

326 IAC 8-2-9

Booth K-6 has coating limitations imposed based upon this rule. These limitations do not change related to the revision.

326 IAC 8-1-1

For Booths K-1 and K-2, the limit was adjusted in permit 141-14152. A 15 pound of VOC per day limit was placed on the two booths and another 15 pound of VOC per day limit for the dip and spin dry film coating machine. The two paint booths were determined to operate independently of each other and independently of the coating machine. Instead of the 15 pound per day limit covering both booths, there should have been a separate limit placed on each booth. This concept is based upon the wording of rule 8-1-1, which states that rules apply on a facility basis. Therefore, each paint booth can be considered a separate facility and get its own separate limit.

For Booth K-6, an additional limit will be added to keep its separate emissions below 15 pounds of VOC per day. This type of limit is allowed under rule 8-1-1(b). However, as rule 8-1-1(d) notes, this limit will be forwarded to U.S. EPA as a SIP revision.

# **Compliance Requirements**

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements do not change related to this revision.

## **Adjustments to the Permit**

The following conditions will be adjusted as a result of this revision. This will be shown in the bold/strikeout method for additions/subtractions.

- 1) Condition D.1.1 will be amended as follows:
  - D.1.1 Volatile Organic Compounds (VOC) [326 IAC 2-8-4] [326 IAC 8-6-2(a)] [326 IAC 8-1-1] [326 IAC 8-2]
  - (a) The amount of VOC delivered to the applicators at the total of the two (2 three (3) paint booths (K-1, and K-2, and K-6) and the VOC used at the one (1) centrifuge dip and spin dry film coating machine (L-2), one (1) cold cleaner immersion tank (C-24), six (6) portable cold cleaner degreasers (I-3 through I-8), one (1) cold cleaner tank (C-29), one (1) immersion solvent cleaning tank (I-13), one (1) portable immersion cold cleaner tank (I-14), and three (3) insignificant oil tanks (J-12, C-9 and C-26) shall be limited to less than 98.0 tons per twelve (12) consecutive month period, total, with compliance determined at the end of each month. This will limit the potential to emit VOC from the entire source to less than 100 tons per year. Therefore, the requirements of 326 IAC 2-7 do not apply. Compliance with this limit will also satisfy the requirements of 326 IAC 8-6, Organic Solvent Emission Limitations.
  - (b) The VOC delivered to the applicators at the two (2) paint booths, identified as K-1 and K-2, shall be limited to less than 15 pounds per day, total for each booth. Therefore, pursuant to 326 IAC 8-1-1, the requirements of 326 IAC 8-2 are not applicable.
  - (c) The VOC used at the one (1) centrifuge dip and spin dry film coating machine, identified as L-2, shall be limited to less than 15 pounds per day. Therefore, pursuant to 326 IAC 8-2-1(a)(4), the requirements of 326 IAC 8-2 are not applicable.
- 2) Condition D.1.2 will be amended as follows:

#### D.1.2 Hazardous Air Pollutants (HAPs) [326 IAC 2-8-4]

- (a) The worst case single HAP delivered to the coating applicators at the two (2 three (3) paint booths (K-1, and K-2, and K-6) and used at the one (1) centrifuge dip and spin dry film coating machine (L-2), one (1) cold cleaner immersion tank (C-24), six (6) portable cold cleaner degreasers (I-3 through I-8), one (1) cold cleaner tank (C-29), one (1) immersion solvent cleaning tank (I-13), one (1) portable immersion cold cleaner tank (I-14), and three (3) insignificant oil tanks (J-12, C-9 and C-26) shall be limited to less than 9.9 tons per twelve (12) consecutive month period, total, with compliance determined at the end of each month. This will limit the potential to emit each individual HAP from the entire source to less than 10 tons per year. Therefore, the requirements of 326 IAC 2-7 do not apply.
- (b) The combination of HAPs delivered to the coating applicators in the two (2 three (3) paint booths (K-1, and K-2, and K-6) and the total HAPS used at the one (1) centrifuge dip and spin dry film coating machine (L-2), one (1) cold cleaner immersion tank (C-24), six (6) portable cold cleaner degreasers (I-3 through I-8), one (1) cold cleaner tank (C-29), one (1) immersion solvent cleaning tank (I-13), one (1) portable immersion cold cleaner tank (I-14), and three (3) insignificant oil tanks (J-12, C-9 and C-26), shall be limited to less than 24.7 tons per twelve (12) consecutive month period, total, with compliance determined at the end of each month. This will limit the potential to emit total HAPs from the entire source to less than 25 tons per year. Therefore, the requirements of 326 IAC 2-7 do not apply.
- 3) Condition D.1.3 will be amended as follows:

# D.1.3 Particulate Matter - 10 microns (PM<sub>10</sub>) [326 IAC 2-8-4]

Any change or modification at the  $\frac{\text{two }(2 \text{ three }(3) \text{ paint booths }(\text{K-1, and K-2, and K-6})}{\text{three }(3)}$  which increases the solids delivered to the applicators to 2,130 tons per twelve (12) consecutive month period may cause the potential to emit  $\text{PM}_{10}$  to increase to 100 tons per year or more, making the requirements of 326 IAC 2-7, Part 70, applicable, based on a fifty percent (50%) transfer efficiency and a control efficiency of ninety-eight percent (98%), and shall require prior IDEM, OAQ, approval. This Condition, in conjunction with the limit of Condition D.2.2, will limit the potential to emit  $\text{PM}_{10}$  to less than 100 tons per year from the entire source and make the requirements of 326 IAC 2-7, Part 70, not applicable.

- 4) Condition D.4.1 will be amended as follows:
  - D.4.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]
  - (a) For the topcoat operation, the VOC delivered to a coating applicator that applies extreme performance coatings shall be limited to 3.5 pounds of VOC per gallon of coating excluding water.
  - (b) For the primer operation, the VOC delivered to a coating applicator shall be limited to 3.0 pounds of VOC per gallon of coating, excluding water.
  - (c) Pursuant to 326 IAC 8-1-1(b), the requirements of 8-2 (listed here as D.4.1(a) and D.4.1(b)) are not applicable on days that the VOC delivered to the applicator is limited to less than 15 pounds per day.
- 5) Condition D.4.5 will be amended as follows:
  - D.4.5 Record Keeping Requirements
  - (a) To document compliance with Condition D.4.1, the Permittee shall maintain records in accordance with (1 and 2) below. Records maintained for (1) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC emission limits.

- (1) The VOC content of each coating material and the solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.
- (2) For coatings used for D.4.1(c), the VOC content of each coating material and the solvents used. These records shall be kept on a daily basis.
- (b) To document compliance with Condition D.4.4, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements of this permit.
- 6) Condition D.4.6 will be added as follows:

# D.4.6 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.4.1(c) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

7) The reporting forms will be amended as follows:

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

#### **FESOP Monthly Report**

Source Name: Imagineering Enterprises, Inc.

Source Address: 1302 West Sample Street, South Bend, Indiana 46619-3895 Mailing Address: 1302 West Sample Street, South Bend, Indiana 46619-3895

FESOP No.: F 141-14152-00090

Facility: Two (2) paint booths, identified as K-1 and K-2

Parameter: VOC usage

Limit: Less than 15 pounds per day, total

Months:	Year:
MOHILIS.	i Eai.

Day	Month 1 VOC usage (lbs)	Month 2 VOC usage (lbs)	Month 3 VOC usage (lbs)	Day	Month 1 VOC usage (lbs)	Month 2 VOC usage (lbs)	Month 3 VOC usage (lbs)
1				17			
2				18			
3				19			
4				20			
5				21			

6		22		
7		23		
8		24		
9		25		
10		26		
11		27		
12		28		
13		29		
14		30		
15		31		
16		No. of deviations		

- 9 No deviation occurred in this month.
- 9 Deviation/s occurred in this month.
  Deviation has been reported on:

Submitted by: Title/Position: Signature: Date: Phone:

Attach a signed certification to complete this report.

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

## **FESOP Monthly Report**

Source Name: Imagineering Enterprises, Inc.

Source Address: 1302 West Sample Street, South Bend, Indiana 46619-3895 Mailing Address: 1302 West Sample Street, South Bend, Indiana 46619-3895

FESOP No.: F 141-14152-00090 Facility: Paint booth K-2 Parameter: VOC usage

Limit: Less than 15 pounds per day

Months:	 Year:	

Day	Month 1 VOC usage (lbs)	Month 2 VOC usage (lbs)	Month 3 VOC usage (lbs)	Day	Month 1 VOC usage (lbs)	Month 2 VOC usage (lbs)	Month 3 VOC usage (lbs)
1				17			
2				18			
3				19			
4				20			

5		21		
6		22		
7		23		
8		24		
9		25		
10		26		
11		27		
12		28		
13		29		
14		30		
15		31		
16		No. of deviations		

- 9 No deviation occurred in this month.
- 9 Deviation/s occurred in this month.
  Deviation has been reported on:

Submitted by:
Title/Position:
Signature:
Date:
Phone:

Attach a signed certification to complete this report.

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

## **FESOP Monthly Report**

Source Name: Imagineering Enterprises, Inc.

Source Address: 1302 West Sample Street, South Bend, Indiana 46619-3895 Mailing Address: 1302 West Sample Street, South Bend, Indiana 46619-3895

FESOP No.: F 141-14152-00090 Facility: Paint booth K-6

Parameter: VOC usage when using non-compliant coatings

Limit: Less than 15 pounds per day

Months:	Year:	

Day	Month 1 VOC usage (lbs)	Month 2 VOC usage (lbs)	Month 3 VOC usage (lbs)	Day	Month 1 VOC usage (lbs)	Month 2 VOC usage (lbs)	Month 3 VOC usage (lbs)
1				17			
2				18			
3				19			

4		20		
5		21		
6		22		
7		23		
8		24		
9		25		
10		26		
11		27		
12		28		
13		29		
14		30		
15		31		
16		No. of deviations		

- 9 No deviation occurred in this month.
- 9 Deviation/s occurred in this month.
  Deviation has been reported on:

Submitted by:
Title/Position:
Signature:
Date:
Phone:

# Attach a signed certification to complete this report.

The report forms on Pages 42, 43, and 44 will be amended to reflect the changes made in Conditions D.1.1 and D.1.2.

# Conclusion

This significant permit revision shall be added to the conditions of the FESOP as 141-17211-00090.